

**CURRICULUM VITAE
(EUROPEAN FORMAT)**



DR. ING. ROSSANA DIMITRI
School of Engineering – Università del Salento

PERSONAL DATA

Name ROSSANA DIMITRI
Nationality Italian
Date of birth 05/01/1980

WORK EXPERIENCE

- Date (from – to) 22.02.2016 – today
- Name and address of employer **Università del Salento**, Department of Innovation Engineering
Ed. La Stecca, via per Monteroni, 73100 Lecce (Italy)
- Position **Assistant professor ICAR08 – Researcher position RTD-B**
- Main responsibilities Teaching and Research on “Computational mechanical modelling of structural interfaces based on advanced numerical methods with a low computational cost”.
- Main subjects of the research Development of effective and innovative computational models for interfacial problems for different scales, applicable also to complex structures made of anisotropic materials.

- Date (from – to) 03.06.2013 – 22.02.2016
- Name and address of employer **Università del Salento**, Department of Innovation Engineering
Ed. La Stecca, via per Monteroni, 73100 Lecce (Italy)
- Position **Assistant professor ICAR08 – Researcher position RTD-A**
- Main responsibilities Teaching and Research within the ERC Starting research grant “INTERFACES”, Grant agreement No. 279439, on “Computational mechanical modelling of structural interfaces based on isogeometric approaches”.
- Main subjects of the research Development of effective and innovative computational models for interfacial debonding, consistent with the actual mixed-mode behaviour at various scales. Modelling is placed in a continuum framework and implemented with the isogeometric method.

- Date (from – to) 01.06.2012 – 31.05.2013
- Name and address of employer **Università del Salento**, Department of Innovation Engineering
Ed. La Stecca, via per Monteroni, 73100 Lecce (Italy)
- Position **Research fellowship**
- Main responsibilities Research within the ERC Starting research grant “INTERFACES”, Grant agreement No. 279439, on “T-Splines-based isogeometric analysis of contact and debonding problems between deformable bodies in the context of large deformations”, advisors Profs. L. De Lorenzis, G. Zavarise.
- Main subjects of the research Formulation and implementation of a contact algorithm within the FEAP code (by R. Taylor).

- Date (from – to) 01.06.2011 – 31.05.2012
- Name and address of employer Gottfried Wilhelm Leibniz Universität Hannover
Institut für Kontinuumsmechanik
Appelstraße 11, 30167 Hannover DeutschlandKontinuumsmechanik
- Position **Research fellowship**
- Main responsibilities Research on “NURBS-based isogeometric analysis of contact problems between deformable bodies in the context of large deformations”, advisors Profs. L. De Lorenzis, P. Wriggers, G. Zavarise.
- Main subjects of the research Formulation and implementation of a contact algorithm within the FEAP code (by R. Taylor).

- Date (from – to) 05.07.2010 – 31.05.2011
- Name and address of employer **ENEA Research Centre of Brindisi, Unità Tecnica Tecnologie dei Materiali Compositi**

(UTTMATB-COMP)

S.S. 7 Appia km 713.7, 72100 Brindisi

Research fellowship

Research within a regional project "MIPER PS_095" (Innovative Materials and Methodologies for Products in Renewable Energy sector), advisor Dr. M. Nacucchi.

- Development and mechanical characterization of thermoplastic composites for structural components and adhesive joining of blades for small sized wind turbines operative in severe environmental conditions (high temperatures in sub-Saharan zones, very low temperatures on the mountains, high humidity and UV ray exposure).
- Development of thermoplastic composites, design and transformation processes for thermal solar panels.

- Position

- Main responsibilities

- Main subjects of the research

08.01.2009 – 30.05.2010

- Name and address of employer

PI.MAR. s.r.l.

via A. Manzoni 32, 73020 Cursi (LE)

- Position

External collaborator

Research on "Development of artificial stone materials containing limestone sludge as filler and structural elements for building construction"

- Main responsibilities

- Main subjects of the research

Experimental investigation and development of innovative building materials containing limestone sludge as filler, in collaboration with Prof. G. Zavarise and Italcementi Group-Brindisi. New artificial stones are designed and produced similarly to the actual ones extracted from local quarries (Cursi-Lecce). Improved durability and resistance properties are reached with the artificial stones, for similar colours and aspects and lower weights with respect to the actual stones. A simplified and inexpensive manufacturing technology is also designed to compete on the market.

- Date (from – to)

01.06.2005 – 31.05.2006

- Name and address of employer

Università degli Studi di Lecce, Department of Innovation Engineering

Ed. La Stecca, via per Monteroni, 73100 Lecce

- Position

Research fellowship

- Main responsibilities

Research within a national project "R.E.S.I.S." (Ricerca e Sviluppo per la Sismologia e l'Ingegneria Sismica) funded by MIUR. Supervisors Prof. Eng. A. La Tegola, Eng. L. De Lorenzis.

- Main subjects of the research

Analytical and experimental investigation in the field of the strengthening of masonry vaulted structures with externally bonded composite fiber materials (FRP). The strengthening solution with FRP composites sheets at the intrados is studied and proposed to decrease the lateral thrust transmitted by arches and vaults to their buttresses, improving, at the same time, the global stability of the vaulted structures.

EDUCATION

- Date (from – to)

16.05.2010 – 28.11.2013

- Name and type of educational institution

Università del Salento, Department of Innovation Engineering

Ed. La Stecca, via per Monteroni, 73100 Lecce

- Main subjects / professional abilities of the studies

Analytical and numerical modeling of interfaces with isogeometric approaches

- Qualification obtained

PhD in "Industrial and Mechanical Engineering" (XXV cycle)

- Level in the national classification

Degree obtained with unanimous agreement of the committee, thesis awarded by the Italian Group for Computational Mechanics (AIMETA) for the Italian selection of the 2013 ECCOMAS PhD Award.

- Title PhD Dissertation

Isogeometric treatment of large deformation contact and debonding problems with NURBS and T-Splines

- Main subjects of the Dissertation

Study on the performances of locally refined T-Spline-based IGA applied to 2D and 3D large deformation frictionless contact and debonding problems, as compared to NURBS (Non-Uniform-Rational-B-Splines) interpolations and standard C^0 -continuous Lagrange finite element interpolations.

- Date (from – to)

01.06.2006 – 16.12.2009

- Name and type of educational institution

Università del Salento, Department of Innovation Engineering

Ed. La Stecca, via per Monteroni, 73100 Lecce

- Main subjects / professional abilities of the studies

Structural mechanics of arches and vaults under static and dynamic loading

- Qualification obtained
- Level in the national classification
 - Title PhD Dissertation
- Main subjects of the Dissertation

PhD in “Materials and Structural Engineering” (XXI Cycle)

Degree obtained with unanimous agreement of the committee

Stability of Masonry Structures under Static and Dynamic Loads

Development and improvement of several strategies to better understand the safety and stability of masonry structures under static or dynamic loads. The limit analysis provides the theoretical basis to examine stability from the analytical point of view, while the discrete element method (DEM) is used to model the discontinuous nature of masonry structures in the numerical formulations.

01.11.1998 – 13.12.2004

Università degli Studi di Lecce, Department of Innovation Engineering

Ed. La Stecca, via per Monteroni, 73100 Lecce

Discipline previste dal curriculum studiorum in Ingegneria industriale

5-years degree (“Laurea”) in Materials Engineering (option: Civil Engineering)

110/110 cum laude, thesis awarded with a scholarship from the University of Salento in memory of Eng. Gabriele De Angelis.

Indagine teorico-sperimentale sul comportamento strutturale di sistemi voltati rinforzati con FRP (Theoretical and experimental investigation of the structural behavior of vaulted systems strengthened with FRP)

Numerical and experimental investigation in the field of the static behavior and failure modes of masonry edge vaults (a valuable part of the architectural and cultural heritage of the Salento peninsula) subjected to uniform loading and imposed displacements on the buttresses. In detail one scaled prototype of edge vaults is tested up to failure, to study the collapse behavior (mechanisms, masonry crushing and sliding along mortar joints) of the structure. Thus, based on the experimental observations, an appropriate arrangement of externally bonded FRP reinforcement is proposed as an efficient solution to decrease the lateral thrust transmitted by the vault to their buttresses. The experimental results are compared with the numerical results obtained from the finite element method (FEM) using a commercial Code (STRAUS7) and a good agreement is found.

01.09.1993 – 20.07.1998

Liceo Scientifico Galileo Galilei Manduria (TA), Italy

High school education in humanities and science

High School degree (“Maturità scientifica”)

60/60

Competences in the field of Structural mechanics, Solid Mechanics, Damage and Fracture Mechanics, Contact Mechanics, Isogeometric Analysis, High performances Finite Elements. Ability to interact with external institutions and industries for studies, research and consulting in applied technologies and technology transfer.

PERSONAL ABILITIES AND COMPETENCES

MOTHER TONGUE

ITALIAN

OTHER LANGUAGES

ENGLISH

- Reading ability B2 (Common European Framework of Reference for Languages)
- Writing ability B2 (Common European Framework of Reference for Languages)
 - Oral ability B2 (Common European Framework of Reference for Languages)

GERMAN

- Reading ability Sufficient
- Writing ability Sufficient
 - Oral ability Sufficient

FRENCH

- Reading ability Good
- Writing ability Sufficient
 - Oral ability Sufficient

ORGANIZING ABILITIES AND COMPETENCES

EDITORIAL ACTIVITY

Since 2011 the undersigned collaborates as revisor for the following journals:

- Aerospace Science and Technology
- Applied Mathematical Modelling
- Applied Sciences
- Composites Part B
- Composite Structures
- Computational Mechanics
- Computational Particle Mechanics
- Computer Methods in Applied Mechanics and Engineering
- Construction & Building Materials
- Engineering Computations
- Engineering Science and Technology, an International Journal
- Engineering Structures
- Engineering Structures and Technologies
- European Journal of Environmental and Civil Engineering
- European Journal of Mechanics A/Solids
- International Journal of Mechanical Sciences
- International Journal of Mechanics and Materials in Design
- International Journal of Solids and Structures
- International Journal for Numerical Methods
- Journal of Composites Science
- Journal of Computational Engineering and Physical Modeling
- Journal of Earthquake Engineering
- Journal of Materials in Civil Engineering
- Journal of Applied and Computational Mechanics
- Machines
- Materials and Structures
- Meccanica
- Polymer Composites
- Proceedings of the institution of civil engineers, Structures and Buildings

Since 2011 the undersigned has also collaborated as revisor for the following conference proceedings:

- GMC-GMA, XX Convegno Nazionale di Meccanica Computazionale, 2014, Cassino, Italy.
- IBMAC, 16th International Brick and Block Masonry Conference, 2016, Padova, Italy.

TECHNICAL ABILITIES AND COMPETENCES

- Use of the computer with common use software, scientific software, Fortran, Qbasic and Matlab programming.
- Use of machines and instrumentation for mechanical tests of materials and structures.

COMMUNICATION SKILLS

- Strong communication skills and naturalness in public speaking developed in ten years of teaching experience and participation in national and international conferences as a speaker.
- Excellent skills in integration in multicultural environments.

ORGANIZATIONAL/MANAGERIAL SKILLS

- Strong ability to plan bureaucratic, logistical and administrative activities developed for the organization of courses, lectures, seminars and exams.
- Significant organizational and coordination skills as a scientific team member.

ARTISTIC ABILITIES AND COMPETENCES

Ten-years degree for the class of VIOLIN. **Conservatoire "Tito Schipa"**, Lecce (Italy). Exhibitions in public concerts as orchestra member and/or solo artist.

OTHER ABILITIES AND COMPETENCES

21.01.2010 – 31.05.2013: Designed "Cultore della materia" within the teaching collaboration in the classes of Structural mechanics I and II, and Computational mechanics. University of Salento, Lecce (Italy).

DRIVING LICENSES

Italian driving licence B.

ATTENDED EDUCATION COURSES

- Summer school on “*Calcolo Avanzato (Advanced Computer science)*”, CASPUR Roma, 27 August-07 September 2012. Rome (Italy).
- Summer school on “*Isogeometric analysis: a new paradigm in the numerical approximation of PDEs*”, Cetraro (CS), 18-22 June 2012. Cetraro (Italy).
- Short course on “*Progettazione a fatica (Fatigue design)*”, Enginsoft, 18-20 June 2012. Brindisi (Italy).
- Short course on “*Creep e danno (Creep and damage)*”, Enginsoft, 4-6 July 2012. Brindisi (Italy).
- German course “*Deutsch als Fremdsprache*”, level A2-1, at the private school VHS, 07/02/2011-14/06/2012. Hannover (Germany).
- Basis German course “*Deutsch als Fremdsprache fur Wissenschaftlerinnen*”, at the Leibniz Univeristat Hannover, 15/09/2011-15/01/2012. Hannover (Germany).
- German course “*Deutsch als Fremdsprache*”, level A1-1, at the private school VHS, 06/09/2011-01/12/2011. Hannover (Germany).
- Short course on “*Metodi numerici per problemi di contatto (Numerical methods for contact problems)*”, Enginsoft, 3-4 June 2011. Brindisi (Italy).
- Short course on “*Introduzione alla progettazione con i materiali compositi (Introduction to design of composite materials)*”, Enginsoft, 22-24 September 2010. Brindisi (Italy).
- Summer school “*Materiali Compositi (Composite materials)*”, CETMA, 13-15 September 2010. Brindisi (Italy).
- 17th IUTAM Summer School on “*Modelling and Simulation of Multiscale Continuum Systems*”, CISM, 28 June-02 July, 2010, T. Zohdi e P. Papadopoulos. Udine (Italy).
- First International conference on “*Computational Contact Mechanics*”, 16-18 September 2009. Lecce (Italy).
- Course on “*modeFRONTIER*”, Università del Salento, 09-10 June, 2009. ESTECO/EnginSoft. Lecce (Italy).
- Course on “*Numerical Modelling of Concrete Cracking*”, CISM 18-22 May, 2009, G. Hofstetter e G. Meschke. Udine (Italy).
- Course on “*Ansys Workbench*”, Università del Salento, April-May, 2009, G. Zavarise. Lecce (Italy).
- Academic course on “*Meccanica computazionale – modulo B (Computational Mechanics – Part B)*”, academic year 2008-2009, 54 hours, Università del Salento, School of Engineering, Prof. G. Zavarise. Lecce (Italy).
- Academic course on “*Meccanica computazionale – modulo A (Computational Mechanics – Part A)*”, academic year 2008-2009, 54 hours, Università del Salento, School of Engineering, Prof. G. Zavarise. Lecce (Italy).
- Short course “*Il metodo degli elementi finiti (The finite element method)*”, May-October 2007, 51 hours, Università del Salento, School of Engineering, Prof. G. Zavarise. Lecce (Italy).
- *English Course-level alte C1, CLA, Courses of General English Language, 60 hours, January-June, 2007. Lecce (Italy).*
- Meeting on “*Case silenziose ed ecosostenibili*”, Università degli studi di Lecce, School of Engineering, 20 December 2005. Lecce (Italy).
- Short course on “*Edifici ed Efficienza Energetica*”, Università degli studi di Lecce, School of Engineering, 26 November 2005. Lecce (Italy).
- Short course on “*Structural Assesment of Heritage Buildings*”, Rose School, 03 – 07 October 2005. Pavia (Italy).

AWARDS

FURTHER INFORMATION

- Member of the Shell Buckling People website. <https://shellbuckling.com/people.php> since 2017.

- Member of the Italian Association SISCO, and teaching representative for the University of Salento (Società Italiana di Scienza delle Costruzioni) since 20/07/2018.
- Scientific coauthor for the Best Student Paper Award “N. Fantuzzi, F. Tornabene, M. Bacciocchi, R. Dimitri - Free vibration analysis of arbitrarily shaped Functionally Graded Carbon Nanotube-reinforced plates, Composite Part B 2016, 1-25”, during the international conference “Multiscale Innovative Materials and Structures – MIMS16”, Cetara (Salerno), October 28-30, 2016.
- ECCOMAS Award for the PhD theses 2013 on Computational Methods in Applied Sciences and Engineering (winner for the Italian selection with the thesis entitled “Isogeometric treatment of large deformation contact and debonding problems with NURBS and T-Splines”).
- Member of the Italian Association of Theoretical and Applied Mechanics AIMETA since 01/01/2013.
- Gabriele De Angelis Award for the best 5-year Degree Thesis 2004 (winner for the local selection at Università del Salento, Department of Innovation Engineering, Lecce, with the thesis entitled “Indagine teorico-sperimentale sul comportamento strutturale di sistemi voltati rinforzati con FRP (Theoretical and experimental investigation of the structural behavior of vaulted systems strengthened with FRP).

PROFESSIONAL HABILITATIONS

Habilitated as Professional Engineer in June 2005. Registered Professional Engineer since October 2006 in the Province of Taranto, n. 2344.

SCIENTIFIC HABILITATIONS

Habilitated as Associate Professor in the area 08/B2 in July 2017.

DIRECTION OR PARTICIPATION TO THE EDITORIAL BOARD OF JOURNALS AND BOOK SERIES

- Member of the Editorial Board for the Journal ALKÜ Fen Bilimleri Dergisi, ALKU Journal of Science
<http://dergipark.gov.tr/alku/board>
- Member of the Editorial Board for Structural and Computational Mechanics Book Series [ISSN: 2421-2822]
<http://www.editrice-esculapio.com/structural-and-computational-mechanics-book-series/>
- Member of the Editorial Board and Assistant Editor for the journal Curved and Layered Structures [ISSN: 2353-7396]
<http://www.degruyter.com/view/j/cls>
- Guest Editor for the Special Issue “Advanced Composite Materials Applied to Structural Mechanics” for Journal of Composite Science
http://www.mdpi.com/journal/jcs/special_issues/composite_structural_mechanics
- Guest Editor for the Special Issue “Advanced Theoretical and Computational Methods for Complex Materials and Structures” for Applied Sciences
https://www.mdpi.com/journal/applsci/special_issues/complex_materials

CONFERENCE ORGANIZATIONS

- 2020: Member of the International Scientific Committee for the Contact Mechanics International Symposium CMIS 2020, 13-15 May 2020, Chexbres, Switzerland.
<https://cmis2020.epfl.ch/>
- 2019: Director of the MiniSymposium MS-42 “Advanced mechanical modeling of composite materials and structures” for the International Conference on Nonlinear Solid Mechanics, ICoNSoM 2019, 16-19 June, Rome, Italy. <http://www.memocsevents.eu/iconsom2019/mini-symposia/>
- 2018: Director of the MiniSymposium MS-036 “Advanced Modelling of Composite Materials and Structures” for the International Conference on Computational Methods, ICCM 2018, 6-10 August, Rome, Italy. <http://sci-en-tech.com/ICCM/index.php/ICCM2018/ICCM2018/schedConf/trackPolicies>
- 2018: Member of the International Organizing Committee for the International Conference on Computational Methods, ICCM 2018, 6-10 August, Rome, Italy. <http://www.sci-en-tech.com/ICCM2018/ICCM2018committees.pdf>
- 2018: Member of the International Scientific Advisory Committee for the International Conference on Computational Methods, ICCM 2018, 6-10 August, Rome, Italy. <http://www.sci-en-tech.com/ICCM2018/ICCM2018committees.pdf>
- 2018: Member of the International Scientific Committee for the Contact Mechanics International Symposium CMIS 2018, 14-16 May 2018, Biella, Italy.

<http://conference.unisalento.it/ocs/index.php/cmis/index/pages/view/committees>

- 2017: Scientific Secretary for the 5th International Conference on Computational Contact Mechanics, ICCCM 2017, 5-7 July 2017, Lecce, Italy.
<http://conference.unisalento.it/ocs/index.php/icccm/index/pages/view/committees>
- 2015: Member of the Local Organizing Committee for the 86th Annual Meeting of the International Association of Applied Mathematics and Mechanics, GAMM 2015, 23-27 March, Lecce, Italy.
<http://conference.unisalento.it/ocs/index.php/gamm/index/pages/view/committees?#LocalOrganizingCommittee>

PARTICIPATION TO RESEARCH GROUPS

- 2018: Associated investigator (Unit of Università del Salento), for the proposal PRIN2017, with the title "Homogenization Methods in Materials & Structures – HOMM&S", South line (submitted). Prot. 201785RPK7.
- 2017: Annual individual financing by ANVUR2017 (3000 euro), "Fondo per le attività base di ricerca", ex art. 1, commi 295 e seguenti, della Legge 11 dicembre 2'16 n. 232.
- 2016 – 2018: scientific collaboration with the University of Bologna (DICAM) (Prof. F. Tornabene) and the Texas University (Department of Mechanical Engineering Advanced Computational Mechanics Laboratory) (Prof. J.N. Reddy) for the "structural modelling of composite plates and shells through the implementation of some advanced numerical methods with a low computational cost".
- 2016 – 2018: Partecipazione all'Accordo di collaborazione tra Università del Salento (Lecce) ed il Centro di Ricerca in Scienza e Tecnica per la conservazione del Patrimonio Storico-Architettonico (CISTeC), Roma, in qualità di referente scientifico per il settore Scienza delle Costruzioni insieme al prof. G. Zavarise.
- 2016 – 2018: Participation to PRIN 2015 - Advanced mechanical modeling of new materials and structures for the solution of 2020 Horizon challenges. Resp. Scientifico Prof. Zavarise Giorgio. University of Salento. Lecce.
- 2012 - 2015: Participation to ERC – Mechanical modeling of interfaces in advanced materials and structures (INTERFACES), Resp. Scientifico Prof. De Lorenzis Laura. University of Salento. Lecce.
- 2011 – 2012: Collaboration as visiting scientist with the Institut für Kontinuumsmechanik Gottfried Wilhelm Leibniz Universität Hannover, Prof. P. Wriggers. Germany.
- 2010 - 2012: Participation to PRIN 2008 - Meccanica del contatto e della frattura: aspetti numerici e applicazioni di tecnologia avanzata. Prot. 2008SE9TBA_003, Resp. Scientifico Prof. Zavarise Giorgio. University of Salento. Lecce.
- 2010 - 2011: Participation to the regional project MIPER PS_095 – Innovative Materials and Methodologies for Products in Renewable Energy sector. UTMATB-COMP ENEA. Brindisi.
- 2009: Application of a proposal MISPE (Materiali Innovativi da Scarti, Per l'Edilizia Sostenibile), PO Puglia per il FSE 2007/2013. Future in research 19/2009.
- 2008: Participation to Bando Futuro in Ricerca 2008 – Meccanica della frattura, della decoesione e del contatto per materiali innovativi. Resp. Unità di ricerca De Lorenzis Laura, Coord. Scientifico Paggi Marco. Codice, RBFR08MUSF_002, durata 36 mesi. University of Salento. Lecce.
- 2005 - 2006: Participation to "R.E.S.I.S." (Ricerca e Sviluppo per la Sismologia e l'Ingegneria Sismica. Soggetti attuatori: INGV con ENEA, Consorzio TRE, Consorzio CETMA, Università degli Studi di Lecce, D'Appolonia Spa.

LECTURES

- 2019: Course for PhD students (3rd level) entitled "Isogeometric analysis: fundamentals of CAD-FEM integration for interfacial problems". Doctoral Course in Engineering of Complex Systems, Università del Salento, Lecce.
- 18/11/2016: Lecture within the PhD program of the Texas A&M University, entitled "Isogeometric Analysis: an innovative frontier of integration between FEM and CAD". Texas A&M University.
- 24/11/2016: Seminar for PhD students entitled "Isogeometric analysis: a CAD-FEM

integration for interfacial fracture and contact mechanics problems". Alma Mater Studiorum, Bologna.

TEACHING

- Academic year 2018–2019: lecturer for the class of Scienza delle Costruzioni A+B (Structural Mechanics A+B), 12 CFU, School of Civil Engineering, Università del Salento; lecturer for the class of Scienza delle Costruzioni (Structural Mechanics), 9 CFU, School of Industrial Engineering, Università del Salento; lecturer for the class of Complementi di Scienza delle Costruzioni (Structural Mechanics II).
- Academic years 2016–2017, 2017-2018: lecturer for the class of Scienza delle Costruzioni A (Structural Mechanics A), 6 CFU, School of Engineering, Università del Salento.
- Academic year 2014–2015: lecturer for the class of Scienza delle Costruzioni (Structural Mechanics), 12 CFU, School of Engineering, Università del Salento.
- Academic years 2012–2013, 2013–2014: lecturer for the class of Complementi di Scienza delle Costruzioni (Structural Mechanics II), 6 CFU, School of Engineering, Università del Salento.

TEACHING ASSISTANTSHIP

Academic year 2009 – 2018: teaching assistantship for the classes of

- Scienza delle Costruzioni (Structural Mechanics), Prof. G. Zavarise, School of Engineering, Università del Salento.
- Meccanica computazionale (Computational Mechanics), Prof. G. Zavarise, School of Engineering, Università del Salento.

Academic year 2008 – 2012: teaching assistantship for the class of

- Complementi di Scienza delle Costruzioni (Structural Mechanics II), Ing. L. De Lorenzis, School of Engineering, Università del Salento.

Academic year 2006 – 2007: teaching assistantship for the class of

- Statica e Recupero Strutturale dei Beni Architettonici (Static and Structural Rehabilitation of the Architectural Heritage), Ing. L. De Lorenzis, Inter-school course in Technologies for the Cultural Heritage, Università del Salento.

Academic year 2005 – 2006: teaching assistantship for the class of

- Statica e Recupero Strutturale dei Beni Architettonici (Static and Structural Rehabilitation of the Architectural Heritage), Ing. L. De Lorenzis, Inter-school course in Technologies for the Cultural Heritage, Università del Salento.

THESIS TUTORSHIP

Cotutor of Bachelor degree theses

- [1] Mattia Brancone, Bachelor Degree in Industrial Engineering, academic year 2012/2013: "**Analisi statica di giunzioni adesive ibride mediante tecniche isogeometriche** (Static analysis of adhesive hybrid joints with isogeometric techniques)". Università del Salento, Italy.
- [2] Mariarita De Rinaldis, Bachelor Degree in Mechanical Engineering, academic year 2012/2013: "**Analisi statica di strutture voltate in muratura con tecniche isogeometriche** (Static analysis of masonry vaulted structures with isogeometric techniques)". Università del Salento, Italy.
- [3] Luisa Perlangeli, Bachelor Degree in Industrial Engineering, academic year 2012/2013: "**Risoluzione approssimata del problema elastico con tecniche isogeometriche** (Approximate resolution of the elastic problem with isogeometric techniques)". Università del Salento, Italy.
- [4] Tiziana Sergi, Bachelor Degree in Industrial Engineering, academic year 2012/2013: "**Analisi isogeometrica per lo studio di interfacce in materiali eterogenei** (Isogeometric analysis for the study of interfaces in heterogeneous materials)". Università del Salento, Italy.
- [5] Andrea Trevisi, Bachelor Degree in Industrial Engineering, academic year 2011/2012: "**Integrazione tra modellazione geometrica e analisi FEM con tecniche**".

isogeometriche (Integration between geometrical modeling and FEM analysis with isogeometric techniques)". Università del Salento, Italy.

Cotutor of Master degree theses

- [1] Graziano Lazzari, Master Degree in Material Engineering, academic year 2006/2007: "**Studio della risposta dinamica di sistemi arco-portale in muratura** (Study of the dynamic response of arch-portal systems)". Università del Salento, Italy.

Tutor of Master degree theses

- [1] Vincenzo Russo, Master Degree in Civil Engineering, academic year 2016/2017: "**Analytical and numerical study of a new debonding model under mixed-mode conditions**". Università del Salento, Italy.

Tutor of Bachelor degree theses

a.a. 2014/2015

- [1] Bianco Giulia, Bachelor Degree in Civil Engineering: "**Analisi di fenomeni di instabilità nelle travature reticolari da ponte** (Analysis of the instability phenomena in truss systems for bridges)". Università del Salento, Italy.
- [2] Chiarelli Monica, Bachelor Degree in Civil Engineering: "**Modello di zona coesiva bilineare per lo studio del rinforzo di elementi ad arco** (Bilinear cohesive zone model for the study of the reinforcement in arched-elements)". Università del Salento, Italy.
- [3] Cruschi Serena, Bachelor Degree in Civil Engineering: "**Modelli coesivi accoppiati derivati da potenziale: confronto analitico e numerico** (Coupled potential-based cohesive models: a analytical and numerical comparison)". Università del Salento, Italy.
- [4] De Luca Emanuela, Bachelor Degree in Civil Engineering: "**Studio della consistenza fisica del modello di zona coesivo PPR** (Study on the physical consistency for the PPR cohesive zone model)". Università del Salento, Italy.
- [5] Lerna Michela, Bachelor Degree in Civil Engineering: "**Limiti di validità del modello di zona coesiva di Xu-Needleman: studio analitico** (Limits of efficiency for the cohesive zone model by Xu-Needleman: analytical study)". Università del Salento, Italy.
- [6] Orlando Virginia, Bachelor Degree in Civil Engineering: "**Confronto fra soluzioni numeriche di piastre rettangolari e analisi IGA** (Comparison between numerical and IGA-based solutions for rectangular plates)". Università del Salento, Italy.
- [7] Palmieri Andrea, Bachelor Degree in Civil Engineering: "**Studio analitico degli andamenti tensionali e deformativi in una lastra forata** (Analytical study of the stresses and deformations in a perforated rectangular plate with a central circular hole)". Università del Salento, Italy.
- [8] Renni Angela, Bachelor Degree in Civil Engineering: "**Problemi di interfaccia nel distacco di rinforzi in composito da substrati curvi** (Debonding problems between composite reinforcements and curved substrates)". Università del Salento, Italy.
- [9] Rotundo Emanuele, Bachelor Degree in Civil Engineering: "**Fenomeni di instabilità non euleriana per strutture intelaiate** (Phenomena of non-Eulerian instability of beam structures)". Università del Salento, Italy.
- [10] Russo Vincenzo, Bachelor Degree in Civil Engineering: "**Studio analitico del distacco di modo I in interfacce a comportamento elasto-plastico** (Analytical study of the Mode-I debonding in elastic-plastic interfaces)". Università del Salento, Italy.
- [11] Sozzo Eugenio, Bachelor Degree in Civil Engineering: "**Teoria approssimata ed esatta per sollecitazioni da taglio nel solido di De Saint Venant** (Exact and approximated theory for shear stresses within an elastic De Saint Venant solid)". Università del Salento, Italy.
- [12] Strafella Alberto, Bachelor Degree in Civil Engineering: "**Comportamento meccanico di un volume di riferimento al variare dell'interfaccia fibra-matrice** (Mechanical behaviour of a reference for varying fibre-matrix interfaces)". Università del Salento, Italy.
- [13] Strafella Davide, Bachelor Degree in Civil Engineering: "**Studio parametrico sull'instabilità di strutture ad arco di forma variabile** (A parametric study on the instability of arched structures with variable shapes)". Università del Salento, Italy.
- [14] Verbena Marco, Bachelor Degree in Civil Engineering: "**Analisi di pannelli sandwich alveolari mediante la teoria della trave alla Timoshenko** (Analysis of the web-core sandwich panels based on the Timoshenko beam theory)". Università del Salento, Italy.

a.a. 2015/2016

- [15] Adamuccio Gianluca, Bachelor Degree in Civil Engineering: “**Validazione mediante analisi isogeometrica di soluzioni di piastre** (Isogeometric validation for plates solutions)”. Università del Salento, Italy.
- [16] Corvaglia Marialucia, Bachelor Degree in Civil Engineering: “**Confronti numerico-sperimentale del fattore di intensificazione degli sforzi nella meccanica della frattura elastica lineare** (Numerical/experimental comparison for the stress intensity factor within the linear elastic fracture mechanics)”. Università del Salento, Italy.
- [17] Greco Antonella, Bachelor Degree in Civil Engineering: “**Influenza della geometria nei problemi di interfaccia delle superfici curve** (Influence of the geometry on the interfacial problems of curved surfaces)”. Università del Salento, Italy.
- [18] Maniglio Luciano, Bachelor Degree in Civil Engineering: “**Analisi del distacco di modo misto mediante peel test** (Analysis of the mixed-mode debonding in peel tests)”. Università del Salento, Italy.
- [19] Marra Paola, Bachelor Degree in Civil Engineering: “**Legge polinomiale nello studio di problemi di interfaccia** (Polynomial cohesive law for interfacial studies)”. Università del Salento, Italy.
- [20] Raho Marco, Bachelor Degree in Civil Engineering: “**Strutture tensegrali: studio di un modello** (Tensegrity structures: study of a model)”. Università del Salento, Italy.
- [21] Verardo Umberto, Bachelor Degree in Civil Engineering: “**Analisi isogeometrica delle soluzioni in forma chiusa di piastre ellittiche** (Isogeometric analysis of elliptic plates)”. Università del Salento, Italy.
- [22] Vergara Maria, Bachelor Degree in Civil Engineering: “**Validazione analitica di una legge di zona coesiva alternativa** (Analytical validation of an alternative cohesive zone law)”. Università del Salento, Italy.

a.a. 2016/2017

- [23] Belgiovine Vincenzo, Bachelor Degree in Civil Engineering: “**Analisi parametrica del fattore di intensificazione degli sforzi di elementi piani in condizioni di modo misto** (Parametric analysis of the stress intensity factor of plane elements in mixed-mode conditions)”. Università del Salento, Italy.
- [24] Guacci Pamela, Bachelor Degree in Civil Engineering: “**Indagine parametrica del comportamento di un rinforzo su superficie curva all’estradosso** (Parametric investigation of the behavior of a reinforcement at the extrados of a curved surface)”. Università del Salento, Italy.
- [25] Taurino Marta, Bachelor Degree in Civil Engineering: “**Studio numerico del distacco di modo misto di superfici curve rinforzate all’estradosso** (Numerical study of the mixed-mode debonding of curved surfaces reinforced at the extrados)”. Università del Salento, Italy.

a.a. 2017/2018

- [26] Amesano Chiara, Bachelor Degree in Civil Engineering: “**Studio analitico del distacco di modo I in laminate compositi** (Analytical study of the mode-I debonding in laminated composites)”. Università del Salento, Italy.
- [27] Filoni Emanuele, Bachelor Degree in Civil Engineering: “**Modellazione teorica e numerica del distacco di modo misto in provini compositi curvilinei** (Theoretical and numerical modeling of the mixed-mode delamination in composite curved specimens)”. Università del Salento, Italy.
- [28] Gulizia Giovanni, Bachelor Degree in Civil Engineering: “**Indagine parametrica della risposta strutturale di delaminazione in provini curvi di varia forma** (A parametric investigation of the delamination response in curved specimens of different shapes)”. Università del Salento, Italy.
- [29] Quarta Mauro, Bachelor Degree in Civil Engineering: “**Studio analitico dell’interfaccia fibra-matrice a comportamento elastico** (Analytical study of the fiber-reinforcement interface with elastic behavior)”. Università del Salento, Italy.
- [30] Sticchi Matteo, Bachelor Degree in Civil Engineering: “**Modello analitico innovativo per lo studio del distacco di modo misto di interface composite** (Innovative analytical modeling for the study of the mixed-mode delamination in composite interfaces)”. Università

del Salento, Italy.

- [31] Viscoti Matteo, Bachelor Degree in Civil Engineering: “**Sviluppo di un nuovo modello coesivo per lo studio della delaminazione di interfacce ortotrope** (Development of a novel cohesive model for the delamination study in orthotropic interfaces)”. Università del Salento, Italy.

OTHER ACADEMIC RESPONSIBILITIES

- 01.10.2018 – today: Committee chairman for the evaluation exams in Structural Mechanics (bachelor degree), for the courses of Civil Engineering and Industrial Engineering, Università del Salento, Lecce (Italy).
- Academic years 2017 – 2018: member of panel for the student careers in Civil Engineering, Università del Salento, Lecce, Italy.
- Academic years 2017 – 2018: member of the orientation program organized by the C.O.R.T. for the upper-school students, in quality of professor in Civil Engineering, Università del Salento, Lecce, Italy.
- Academic years 2015 – today: Co-examiner for the evaluation of 14 master theses, in Civil Engineering, Università del Salento, Italy.
- Academic years 2013 – today: Faculty Member for the evaluation, admission and individual academic training to the Master Course of Civil Engineering, Università del Salento, Italy.
- Academic years 2014 – today: Faculty Member for the admission to the Bachelor Course of Engineering, CISIA tests, Università del Salento, Italy.
- Academic year 2014–today: Organization member for the “Open days” welcome and orientation program addressed to upper-school students, in quality of professor in Civil Engineering, Università del Salento, Lecce, Italy.
- 20.1.2014 – today: Tester responsibility at the Università del Salento, Lecce, Italy, as support to transportation services for Puglia and Basilicata regions, based on the deliberation CIPE n. 83 and 103/2009 and n. 34/2012.
- 21.01.2010 – today: Member of the examination panel for the classes of Structural Mechanics I and II, and Computational Mechanics. Università del Salento, Lecce (Italy).
- Academic years 2007 – 2009: Activity of tutorship for PhD Students. Winner of a 2-years - fellowship, at the Università del Salento. Department of Innovation Engineering, Lecce (Italy). DR n. 368 of 09/02/2007.

PUBLICATIONS

FURTHER INFORMATION

Publications in international journals:

- [1] B. Karami, D. Shahsavari, M. Janghorban, R. Dimitri, F. Tornabene (2019), “Wave propagation of porous nanoshells”. *Nanomaterials*. Vol. 9(1), 22; <https://doi.org/10.3390/nano9010022>.
- [2] M. Mohammadi, M. Arefi, R. Dimitri, F. Tornabene (2019), “Higher-Order Thermo-Elastic Analysis of FG-CNTRC Cylindrical Vessels Surrounded by a Pasternak Foundation”. *Nanomaterials*. Vol. 9(1), 79; doi:10.3390/nano9010079.
- [3] M. Arefi, E.M.R. Bidgoli, R. Dimitri, M. Baccocchi, F. Tornabene (2019), “Nonlocal bending analysis of curved nanobeams reinforced by graphene nanoplatelets”. *Composites Part B*. Vol. 166, pp.1-12.
- [4] M. Malikan, R. Dimitri, F. Tornabene (2019), “Transient Response of Oscillated Carbon Nanotubes with an Internal and External Damping”. *Composites Part B*. Vol. 158, pp.198-205.
- [5] M. Arefi, E.M.R. Bidgoli, R. Dimitri, F. Tornabene (2018), “Free vibrations of functionally graded polymer composite nanoplates reinforced with graphene nanoplatelets”. *Aerospace Science and Technology*. Vol. 81, pp.108-117.
- [6] M. Malikan, F. Tornabene, R. Dimitri (2018), “Nonlocal three-dimensional theory of elasticity for buckling behavior of functionally graded porous nanoplates using volume integrals”. *Materials Research Express*.

- [7] F.Z. Jouneghani, **R. Dimitri**, F. Tornabene (2018), "Structural response of porous FG nanobeams under hygro-thermo-mechanical loadings". *Composites Part B*. Vol. 152, pp.71-78.
- [8] Y. Kiani, **R. Dimitri**, F. Tornabene (2018), "Free vibration study of composite conical panels reinforced with FG-CNTs". *Engineering Structures*. Vol. 172, pp.472-482.
- [9] M. Arefi, E.M.R. Bidgoli, **R. Dimitri**, M. Baccocchi, F. Tornabene (2018), "Application of sinusoidal shear deformation theory and physical neutral surface to analysis of functionally graded piezoelectric plate". *Composites Part B*. Vol. 151, pp.35-50.
- [10] **R. Dimitri**, F. Tornabene (2018), "Numerical study of the mixed-mode delamination of composite specimens". *Journal of Composite Sciences*. Vol. 2(2), pp.1-33.
- [11] M. Arefi, M. Mohammadi, A. Tabatabaeian, **R. Dimitri**, F. Tornabene (2018), "Two-dimensional thermo-elastic analysis of FG-CNTRC cylindrical pressure vessels". *Steel and Composite Structures*. Vol. 27(4), pp. 525-536.
- [12] Y. Kiani, **R. Dimitri**, F. Tornabene (2018), "Free vibration of FG-CNT Reinforced Composite Skew Cylindrical Shells using Chebyshev-Ritz Formulation". *Composites Part B*. Vol. 147, pp. 169-177.
- [13] F. Tornabene, **R. Dimitri** (2018), "A numerical study of the seismic response of arched and vaulted structures made of isotropic or composite materials". *Engineering Structures*. Vol. 159(3), pp. 332-366.
- [14] F. Zare Jouneghani, P.M. Dashtaki, **R. Dimitri**, M. Baccocchi, F. Tornabene (2018), "First-order shear deformation theory for orthotropic doubly-curved shells based on a modified coupled stress elasticity". *Aerospace Science and Technology*. Vol. 73, pp. 129-147.
- [15] **R. Dimitri**, F. Tornabene, G. Zavarise (2018), "Analytical and numerical modeling of the mixed-mode delamination process for composite moment-loaded double cantilever beams". *Composite Structures*. Vol. 187, pp. 535-553.
- [16] M. Nejati, **R. Dimitri**, F. Tornabene, M. Hossein Yas, J. Alihemmati (2017), "Thermal buckling of nanocomposite stiffened cylindrical shells reinforced by functionally graded wavy carbon nano-tubes with temperature-dependent properties". *Applied Sciences*. Vol. 7(12), 1223, pp. 1-24.
- [17] F. Zare Jouneghani, **R. Dimitri**, M. Baccocchi, F. Tornabene (2017), "Free vibration analysis of functionally graded porous doubly-curved shells based on first-order shear deformation theory". *Applied Sciences*. Vol. 7(12), 1252, pp. 1-20.
- [18] M. Nejati, A. Asanjarani, **R. Dimitri**, F. Tornabene (2017), "Static and Free Vibration Analysis of Functionally Graded Conical Shells Reinforced by Carbon Nanotubes". *International Journal of Mechanical Sciences*. Vol. 130, pp. 383-398.
- [19] **R. Dimitri**, P. Cornetti, V. Mantic, M. Trullo, L. De Lorenzis (2017), "Mode-I debonding of a double cantilever beam: A comparison between cohesive crack modeling and finite fracture mechanics". *International Journal of Solids and Structures*. Vol. 124, pp. 57-72.
- [20] **R. Dimitri**, G. Zavarise (2017), "Isogeometric treatment of frictional contact and mixed mode debonding problems". *Computational Mechanics*. Vol. 60(2), pp. 315-332.
- [21] **R. Dimitri**, Y. Li, N. Fantuzzi, F. Tornabene (2017), "Innovative Modeling of the Crack path and Stress Intensity Factor for Arbitrary Shaft Configurations". *Advanced Materials & Technology*. Vol. 5(1), pp. 020-035.
- [22] N. Fantuzzi, F. Tornabene, M. Baccocchi, **R. Dimitri** (2017), "Free vibration analysis of arbitrarily shaped Functionally Graded Carbon Nanotube-reinforced plates". *Composites Part B Engineering*. Vol. 115, pp. 384-408.
- [23] Y. Li, S. Cao, **R. Dimitri**, N. Fantuzzi, F. Tornabene (2017), "Analytical and numerical investigation of the stiffness matrix for edge-cracked circular shafts". *Fatigue & Fracture of Engineering Materials & Structures*. Vol. 40(3), pp. 3918-

- [24] **R. Dimitri**, N. Fantuzzi, Y. Li, F. Tornabene (2017),
“Numerical computation of the crack development and SIF in composite materials with XFEM and SFEM”. *Composite Structures*. Vol. 160, pp. 468-490.
- [25] R. Ramkumar, **R. Dimitri**, F. Tornabene (2016),
“Numerical study on the free vibration and thermal buckling behavior of moderately thick functionally graded structures in thermal environments”. *Composite Structures*. Vol. 157, pp. 207-221.
- [26] **R. Dimitri**, N. Fantuzzi, F. Tornabene, G. Zavarise (2016),
“Innovative numerical methods based on SFEM and IGA for computing stress concentrations in isotropic plates with discontinuities”. *International Journal of Mechanical Sciences*. Vol. 118, pp. 166-187.
- [27] F. Tornabene, **R. Dimitri**, E. Viola (2016),
“Transient dynamic response of generally-shaped arches based on a GDQ-time stepping method”. *International Journal of Mechanical Sciences*. Vol. 114, pp. 277-314.
- [28] N. Fantuzzi, **R. Dimitri**, F. Tornabene (2016),
“A SFEM-based evaluation of mode-I Stress Intensity Factor in composite structures”. *Composite Structures*. Vol. 145, pp. 162-185.
- [29] S. Kamarian, M. Salim, **R. Dimitri**, F. Tornabene (2016),
“Free vibration analysis of conical shells reinforced with agglomerated carbon nanotubes”. *International Journal of Mechanical Sciences*. Vol. 108-109, pp. 157-165.
- [30] **R. Dimitri**, G. Zavarise (2015),
“T-splines discretizations for large deformation contact problems”. *Proceedings in Applied Mathematics and Mechanics (PAMM)*. Vol. 15, pp. 183-184.
- [31] **R. Dimitri**, M. Trullo, L. De Lorenzis, G. Zavarise (2015),
“Coupled cohesive zone models for mixed-mode fracture: a comparative study”. *Engineering Fracture Mechanics*. Vol. 148, pp. 145-179.
- [32] F. Tornabene, N. Fantuzzi, M. Baccocchi, **R. Dimitri** (2015),
“Free vibrations of composite oval and elliptic cylinders by the generalized differential quadrature method”. *Thin-Walled Structures*. Vol. 97, pp. 114-129.
- [33] F. Tornabene, N. Fantuzzi, M. Baccocchi, **R. Dimitri** (2015),
“Dynamic analysis of thick and thin elliptic shell structures made of laminated composite materials”. *Composite Structures*. Vol. 133, pp. 278-299.
- [34] **R. Dimitri**, F. Tornabene (2015),
“A parametric investigation of the seismic capacity for masonry arches and portals of different shapes”. *Engineering Failure Analysis*. Vol. 52, pp. 1-34.
- [35] **R. Dimitri** (2015),
“Isogeometric treatment of large deformation contact and debonding problems with T-splines: a review”. *Curved and Layered Structures*. Vol. 2, pp. 59-90.
- [36] **R. Dimitri**, M. Trullo, L. De Lorenzis, G. Zavarise (2014),
“A consistency assessment of coupled cohesive zone models for mixed-mode debonding problems”. *Frattura ed Integrità Strutturale*. Vol. 29, pp. 266-283.
- [37] **R. Dimitri**, L. De Lorenzis, P. Wriggers, G. Zavarise (2014),
“NURBS- and T-spline-based isogeometric cohesive zone modeling of interface debonding”. *Computational Mechanics*. Vol. 54, pp. 369-388.
- [38] **R. Dimitri**, L. De Lorenzis, M.A. Scott, P. Wriggers, R.L. Taylor, G. Zavarise (2014),
“Isogeometric large deformation frictionless contact using T-splines”. *Computer Method in Applied Mechanics and Engineering*. Vol. 269, pp. 394-414.
- [39] L. De Lorenzis, **R. Dimitri**, J. Ochsendorf (2012),
“Structural study of masonry buttresses: the trapezoidal form”. *ICE Proceedings – Structures and Buildings*. Vol. 165(9), pp. 483-498.
- [40] L. De Lorenzis, **R. Dimitri**, J. Ochsendorf (2012),
“Structural study of masonry buttresses: the stepped form”. *ICE Proceedings – Structures and Buildings*. Vol. 165(9), pp. 499-521.
- [41] **R. Dimitri**, L. De Lorenzis, G. Zavarise (2011),

"Numerical prediction of the dynamic behavior of masonry columns and arches on buttresses with the discrete element method". *Engineering Structures*. Vol. 33(12), pp. 3172-3188.

- [42] L. De Lorenzis, **R. Dimitri**, A. La Tegola (2007),
"Reduction of the lateral thrust of masonry arches and vaults with FRP composites".
Construction and Building Materials. Vol. 21, pp. 1415-1430.

Books:

- [1] F. Tornabene, **R. Dimitri** (2015),
"Stabilità dell'Equilibrio Elastico". *ESCOLAPIO, Bologna*. ISBN: 978-88-7488-845-0.

Book Chapters:

- [1] **R. Dimitri**, G. Zavarise (2016),
"Numerical study of discrete masonry structures under static and dynamic loading".
Chapter 11 of the book entitled "*Computational Modeling of Masonry Structures Using the Discrete Element Method*", IGI Global. DOI: 10.4018/978-1-5225-0231-9, ISBN13: 9781522502319. Ed. By Sarhosis, Bagi, Lemos and Milani.

Conference proceedings:

- [1] **R. Dimitri**, F. Tornabene (2018),
"Advanced modeling of mixed-mode adhesive materials and interfaces", *GIMC XXII-GMA IX, 13-14 September 2018, Ferrara, Italy*.
- [2] G. Alotta, E. Bologna, M. Di Giuseppe, **R. Dimitri**, F.P. Pinnola, G. Zavarise, M. Zingales (2018), "A non-local interface mechanical mode-I model for ascending thoracic aorta dissections (ATAD)", *4th International Forum on Research and Technologies for Society and Industry, RTSI, 10-13 September 2018, Palermo, Italy*.
- [3] **R. Dimitri**, F. Tornabene (2018),
"Numerical study of the mixed-mode delamination of generally-shaped composite interfaces", *21st International Conference on Composite Structures, ICCS21 4-7 September 2018, Bologna, Italy*.
- [4] **R. Dimitri**, F. Tornabene (2018),
"Advanced modeling of the mixed-mode delamination for composite specimens", *International Conference on Computational Methods, ICCM 6-10 August 2018, Rome, Italy*.
- [5] **R. Dimitri**, G. Zavarise (2018),
"Numerical modeling of the debonding process of composite double cantilever beams", *10th European Solid Mechanics Conference, ESMC 2018, 2-6 July 2018, Bologna, Italy*.
- [6] G. Alotta, **R. Dimitri**, F.P. Pinnola, G. Zavarise, M. Zingales (2018),
"A non-local fractional-order interface mechanical model", *10th European Solid Mechanics Conference, ESMC 2018, 2-6 July 2018, Bologna, Italy*.
- [7] G. Alotta, **R. Dimitri**, F.P. Pinnola, G. Zavarise, M. Zingales (2018),
"Non-local interface model based on fractional operators", *Contact Mechanics International Symposium - CMIS, 16-18 May 2018. Biella (TO), Italy*.
- [8] **R. Dimitri**, G. Zavarise (2018),
"Numerical study of the mixed-mode delamination of composite interfaces", *Contact Mechanics International Symposium - CMIS, 16-18 May 2018. Biella (TO), Italy*.
- [9] **R. Dimitri**, G. Zavarise (2017),
"An innovative study of the debonding process for adhesively bonded interfaces under different loading conditions", *AIMETA, XXIII Congresso - Associazione Italiana di meccanica teorica e Applicata, 04-07 September 2017. Salerno, Italy*.
- [10] **R. Dimitri**, G. Zavarise (2017),
"An innovative treatment of frictional contact and mixed mode debonding problems based on IGA", *ICCCM, International Conference on Computational Contact Mechanics, 05-07 July 2017. Lecce, Italy*.
- [11] N. Fantuzzi, F. Tornabene, M. Baccocchi, **R. Dimitri** (2016),
"Free Vibration of Functionally Graded Carbon Nanotube-Reinforced Composite Plates with Arbitrary Domains and Discontinuities", *Multiscale Innovative Materials and Structures (MIMS16), 28-30 October 2016. Cetara, Italy*.
- [12] **R. Dimitri**, N. Fantuzzi, F. Tornabene, G. Zavarise (2016),
"A comparative SFEM- and IGA-based numerical prediction of the stress concentration factor in plates with discontinuities", *GIMC-GMA, XXI Convegno Italiano di Meccanica Computazionale e VIII Riunione del Gruppo Materiali AIMETA, 27-29 June. Lucca, Italy*.
- [13] P. Cornetti, **R. Dimitri**, L. De Lorenzis, V. Mantic (2016),
"Cohesive crack model and finite fracture mechanics: analytical solutions to the double

- cantilever beam test”, *ECF21 21st European Conference on Fracture, 20-24 June 2016. Catania, Italy.*
- [14] **R. Dimitri**, G. Zavarise (2016),
“Discrete modeling of masonry structures under dynamic loading”, *16th International Brick and Block Masonry Conference - 26-30 June 2016, Padova, Italy.*
- [15] **R. Dimitri**, M. Trullo, P. Cornetti, L. De Lorenzis (2015),
“Analytical comparison between cohesive crack modeling and finite fracture mechanics for mode-I loading conditions”, *XXII Congresso - Associazione Italiana di Meccanica Teorica e Applicata, 14-17 September 2015. Genova, Italy.*
- [16] **R. Dimitri**, L. De Lorenzis, G. Zavarise (2015),
“IGA-based cohesive zone modeling for mixed-mode debonding”, *XXII Congresso - Associazione Italiana di Meccanica Teorica e Applicata, 14-17 September 2015. Genova, Italy.*
- [17] **R. Dimitri**, L. De Lorenzis, G. Zavarise (2015),
“T-spline-based isogeometric treatment of mixed-mode debonding”, *ICCCM15 IV. International Conference on Computational Contact Mechanics, 27-29 May 2015. Hannover, Germany.*
- [18] **R. Dimitri**, G. Zavarise (2015),
“T-splines discretizations for large deformation contact problems”, *GAMM 86th Annual Meeting, 23-27 March 2015. Lecce, Italy.*
- [19] **R. Dimitri**, M. Trullo, L. De Lorenzis, G. Zavarise (2014),
“A comparative evaluation of coupled mixed-mode cohesive zone laws for interfacial debonding”, *WCCM XI, 11th World Congress on Computational Mechanics, 20-25 July 2014. Barcelona, Spain.*
- [20] M. Trullo, **R. Dimitri**, L. De Lorenzis, D. Schilling (2014),
“Adaptive local refinement in isogeometric contact analyses using hierarchical B-splines”, *WCCM XI, 11th World Congress on Computational Mechanics, 20-25 July 2014. Barcelona, Spain.*
- [21] **R. Dimitri** (2014),
“Isogeometric treatment of large deformation contact and debonding problems with NURBS and T_Splines”, *WCCM XI, 11th World Congress on Computational Mechanics, 20-25 July 2014. Barcelona, Spain.*
- [22] **R. Dimitri** (2014),
“Isogeometric treatment of large deformation contact and debonding problems with NURBS and T_Splines”, *GIMC-GMA 2014, XX Convegno Nazionale di Meccanica Computazionale, 11-13 June 2014. Cassino, Italy.*
- [23] **R. Dimitri**, M. Trullo, L. De Lorenzis, G. Zavarise (2014),
“A consistency study of cohesive zone models for mixed-mode debonding problems”, *GIMC-GMA 2014, XX Convegno Nazionale di Meccanica Computazionale, 11-13 June 2014. Cassino, Italy.*
- [24] **R. Dimitri**, L. De Lorenzis, P. Wriggers, G. Zavarise (2014),
“Isogeometric contact and debonding analyses using T-splines”, *CMIS 2014, Contact Mechanics International Symposium, 03-05 February 2013. Abu Dhabi, UAE.*
- [25] **R. Dimitri**, L. De Lorenzis, G. Zavarise (2013),
“A T-spline-based approach for interface debonding using cohesive zone models”, *AIMETA 2013, XXI congresso associazione italiana di meccanica teorica e applicata, 17-20 September 2013. Torino, Italy.*
- [26] **R. Dimitri**, L. De Lorenzis, P. Wriggers, G. Zavarise (2013),
“A T-spline-based isogeometric approach to cohesive zone modeling”, *ICCCM 2013, 3rd international conference on computational contact mechanics, 10-12 July 2013. Lecce, Italy.*
- [27] **R. Dimitri**, L. De Lorenzis, P. Wriggers, G. Zavarise (2013),
“T-spline-based isogeometric cohesive zone modeling of interface debonding”, *CFRAC 2013, The third international conference on computational modeling of fracture and failure of materials and structures, 5-7 June 2013. Prague, Czech Republic.*
- [28] L. De Lorenzis, **R. Dimitri**, P. Wriggers, R.L. Taylor, M.A. Scott, G. Zavarise (2013),
“Isogeometric treatment of multi-patch contact and debonding problems including local

refinement with T-splines”, *Advances in Computational Mechanics. A conference celebrating the 70th birthday of Thomas J.R. Hughes, 24-27 February 2013. San Diego, California.*

- [29] U. Galietti, **R. Dimitri**, D. Palumbo, P. Rubino (2012),
“Thermal analysis and mechanical characterization of GFRP joints”, *ECCM15, 15th European Conference on Composite Materials, 24-28 June 2012. Venice, Italy.*
- [30] L. De Lorenzis, **R. Dimitri**, B. Codacci Pisanelli, G. Zavarise (2012),
“An innovative technique for strengthening of masonry edge vaults: experiments and modeling”, *Domes in the world, 19-23 Marzo 2012. Florence, Italy.*
- [31] U. Galietti, **R. Dimitri**, D. Palumbo, P. Rubino (2011),
“Analisi termografica e caratterizzazione meccanica di giunti adesivi in GFRP”, 14^o Congresso AIPND, *Proceedings books IDN 13. 26-28 October 2011. Florence, Italy.*
- [32] **R. Dimitri**, L. De Lorenzis (2007),
“Collapse of masonry arches of different shape under constant lateral acceleration”, *Studies on Historical Heritage-SHH07, 17-21 September 2007 (pp.503-510). Antalya, Turkey.*
- [33] L. De Lorenzis, **R. Dimitri**, A. La Tegola (2006),
“Valutazione teorico-sperimentale della spinta di volte e spigolo in muratura con fasciature in FRP”, *WONDERmasonry, 6 April 2006. (pp. 319-330). Firenze: Paolo Spinelli (Italy).*
- [34] L. De Lorenzis, **R. Dimitri**, A. La Tegola (2005),
“Strengthening of masonry edge vaults with FRP composites”, *Composites in Construction 2005 – Third International Conference, Hamelin et al (eds), 11–13 July 2005. Lyon, France.*

Publications on national journals:

- [1] L. De Lorenzis, **R. Dimitri**, A. La Tegola (2006),
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PhD Theses:

- [1] **R. Dimitri** (2013),
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- [2] **R. Dimitri** (2009),
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- [1] **R. Dimitri** (2004),
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- [1] “Caratterizzazione statica di laminati in composito” (May 2011). Technical report 2.1.2 (pp. 49) written by **Dimitri Rossana**, in May 2011 at ENEA (Dipartimento Tecnologie Fisiche e Nuovi Materiali ENEA-Brindisi). Progetto strategico regionale MIPER: Materiale e Metodologie Innovativi per Prodotti nel Settore delle Energie Rinnovabili.
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Chairman in International and National Conferences:

- [1] ICCCM, 2017, *International Conference on Computational Contact Mechanics, Session 5. 06 July 2017, Lecce, Italy.*
- [2] ESMC, 10th *European Solids Mechanics Conference, Session 3-1, Contact Mechanics. 05 July 2018, Bologna, Italy.*

Speaker in International and National Conferences:

- [1] **R. Dimitri**, F. Tornabene (2018),
"Advanced modeling of mixed-mode adhesive materials and interfaces", *GIMC XXII-GMA IX, 13-14 September 2018, Ferrara, Italy.*
- [2] **R. Dimitri**, F. Tornabene (2018),
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- [3] **R. Dimitri**, F. Tornabene (2018),
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ResearchGate

RG Score: 30.56
Score higher than 87.5% of ResearchGate members'
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Manduria, 11/01/2019

In fede

Dott.ssa Ing. Dimitri Rossana

